WHAT IS CLAIMED IS:

1. A method for selecting trees according to a predetermined criterion, comprising the steps of:

a) applying a vibrative member to the tree, the vibrative member being characterized by mechanical vibration resonance properties;

b) vibrating the vibrative member;

c) determining the resonance properties of the vibrative member;

d) calculating an observed quality factor associated with the vibrative member vibrations; and,

e) comparing the observed quality factor with a predetermined relationship between the quality factor and the tree selection criterion.

2. The method of claim 1 wherein the vibrative member has a wood-penetrating end portion characterized by at least one resonance frequency of mechanical vibration.

3. The method of claim 2 wherein the step of applying the vibrative member to the tree comprises embedding the wood-penetrating end portion of the vibrative member into a trunk portion of the tree.

4. The method of claim 2 wherein the vibrative member is fabricated from a metal selected from the group consisting of stainless steel, steel alloys, aluminum and non-ferrous alloys.

5. The method of claim 2 wherein the vibrative member is fabricated from a material selected from the group consisting of ceramic and plastic.

6. The method of claim 1 wherein the tree selection criterion is dependent upon the maturity of the tree.

7. The method of claim 2 wherein the resonance properties of the vibrative member include the at least one resonance frequency of the wood-penetrating end portion and a resonance bandwidth.

8. The method of claim 2 wherein the wood-penetrating end portion includes at least one prong.

9. The method of claim 2 wherein the wood penetrating end portion includes two prongs.

10. The method of claim 9 wherein the two prongs are each characterized by a different resonance frequency.

11. A tree probe comprising:

a) a vibrative member having a wood-penetrating end portion characterized by at least one resonance frequency of mechanical vibration;

b) means for vibrating the vibrative member at about the resonance frequency of the wood-penetration end portion; and,

c) means for measuring vibration amplitude across a frequency range sufficient to determine a characteristic Q value.

12. The tree probe of claim 11 wherein the wood penetrating end portion includes at least one prong.

13. The tree probe of claim 11 wherein the wood penetrating end portion includes two prongs.

14. The tree probe of claim 13 wherein the two prongs are each characterized by a different resonance frequency.

15. The tree probe of claim 11 wherein the vibrative member is fabricated from a metal selected from the group consisting of stainless steel, steel alloys, aluminum and non-ferrous alloys.

16. The method of claim 11 wherein the vibrative member is fabricated from a material selected from the group consisting of ceramic and plastic.

17. The tree probe of claim 15 wherein the vibrative member is a unitary single piece member.

18. The tree probe of claim 16 wherein the vibrative member is a unitary single piece member.

19. The tree probe of claim 11 wherein the means for vibrating the vibrative member comprises a piezoelectric transducer attached to the vibrative member and means for supplying the piezoelectric transducer with an alternating current at about the resonance frequency of the wood penetration end portion of the vibrative member.

20. The tree probe of claim 19 wherein the means for supplying an alternating current includes a tunable sine wave or square wave generator.

21. The tree probe of claim 11 wherein the means for measuring vibration amplitude includes an accelerometer attached to the vibrative member.

22. The tree probe of claim 11 wherein the means for vibrating the vibrative member comprises a piezoelectric transducer attached to the vibrative member and means for supplying the piezoelectric transducer with an alternating current at about the resonance frequency of the wood penetration end portion of the vibrative member and wherein the means for measuring vibration amplitude includes an accelerometer attached to the vibrative member.